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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/788,177	02/16/2001	John David Tucker	KCC-16,190	5302

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EXAMINER

COLE, ELIZABETH M

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 05/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/788,177

Applicant(s)

TUCKER ET AL.

Examiner

Elizabeth M. Cole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21,23-25,28,31-45 and 47 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-21,23-25,28,31-45 and 47 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/22/05.
4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. 2/14/05
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-2, 4-6, 32, 35-37, 41-43, 45, 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peiffer et al, U.S. Patent No. 5,573,717 in view of WO 99/14947 to Haffner et al. Pfeiffer et al discloses a core layer which may further comprise additional outer polymeric layers. See col. 4, lines 1-16. The core layer may comprise a polyolefin resin and an incompatible polymer, (which is referred as the void-initiating polymer) , such as polystyrene, polycyclic olefins, unsaturated hydrocarbon resins etc. See col. 5, line 61 – col. 6, line 25. The core layer may further comprise calcium carbonate. See col. 6, lines 45-46. The presence of the void-initiating polymer produces voids when the film is stretched. See col. 3, lines 32-44 as well as col. 5, lines 7-27. Pfeiffer et al differs from the claimed invention because Pfeiffer et al does not disclose that the polyolefin is a single site catalyst formed ethylene polymer and does not state that the film is breathable. With regard to breathability, since Pfeiffer et al teaches microvoid containing film, it is reasonable to presume that the Pfeiffer et al film would inherently be breathable. Additionally, Haffner discloses a multilayer film which is stretch thinned, (see p. 5, line 3), wherein the intermediate layer comprises an ethylene polymer or copolymer such as a those made by a single site catalyst, (page 12, line 20-33), which may further comprise up to about 50% by weight of additional polymers which would correspond to the claimed incompatible polymer, including polyolefins, such as polyethylene, linear low density polyethylene and polypropylene (page 13, line 31 – page 14, line 22), and 45-65 % by weight of a filler such as calcium

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carbonate, (page 15, lines 1-2). The stretch-thinned material may be incorporated into absorbent articles and combined with fabric layers such as spunbond and meltblown layers. See page 15, lines 11-25. Therefore, it would have been obvious to have employed a single-site catalyzed polymer as taught by Haffner as the core polyolefin material in Pfeiffer. It further would have been obvious to have employed the other polymers as the incompatible polymer which are taught by Haffner in the material of Pfeiffer. One of ordinary skill in the art would have been motivated to employ these materials because Haffner teaches that they are suitable for use in forming films which comprise voids and which are suitable for use in a variety of applications.

3. Claims 1-2, 4-6, 32, 35-37; 41-43, 45, 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haffner et al, WO 99/14047 in view of Morman et al, U.S. Patent No. 6,821,915. Haffner discloses a multilayer film which is stretch thinned, (see p. 5, line 3), wherein the intermediate layer comprises an ethylene polymer or copolymer such as a those made by a single site catalyst, (page 12, line 20-33), which may further comprise up to about 50% by weight of additional polymers which would correspond to the claimed incompatible polymer, including polyolefins, such as polyethylene, linear low density polyethylene and polypropylene (page 13, line 31 – page 14, line 22), and 45-65 % by weight of a filler such as calcium carbonate, (page 15, lines 1-2). The stretch-thinned material may be incorporated into absorbent articles and combined with fabric layers such as spunbond and meltblown layers. See page 15, lines 11-25. Haffner differs from the claimed invention because Haffner does not disclose employing the single site catalyzed layer as the central layer having two outer

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layers. Morman teaches that single-site catalyzed polyolefin layers which further comprise a filler and which are stretch-thinned and breathable can be co-extruded so that they form the core layer of a three layer composite wherein the outer layers are bonding layers. Therefore, it would have been obvious to have formed the layer of Haffner et al so that it comprised the outer bonding layers of Morman et al, motivated by the expectation that this would enhance the ability of the layer of Haffner to bond without adversely affecting the breathability of the film by fusing the breathable film during heat bonding process.

4. Claims 1-2, 4-13, 16-21, 23-25, 27-33, 35-45, 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al, EP 1,070,736 in view of Stopper et al, WO 98/44025 for the reasons set forth in the previous office action, and further in view of Morman, U.S. Patent No. 6,821,915. Lee does not disclose employing a single-site catalyzed polyethylene as the matrix polymer. Morman discloses that single-site catalyzed ethylene polymers may be used as the matrix material in forming breathable laminates which comprise both film layers and fabric layers. See abstract. The breathable layer may further comprise two outer bonding layers. See col. 9, lines 6-15. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed a single-site catalyzed polyolefin having two outer bonding layers as taught by Morman. One of ordinary skill in the art would have been motivated to use a single-site catalyzed polymer because Morman teaches that these materials are particularly suitable for use to form breathable, stretch-thinned films and laminates.

5. Claims 3, 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Stopper and Morman, U.S. Patent No. 6,821,915 as applied to claims above, and further in view of Burns, Jr. et al, U.S. Patent No. 6,32,723 for the reasons set forth in the previous office action.

Information Disclosure Statement

6. The IDS filed 2/22/05 is attached.

7. Applicant's arguments filed 2/22/05 have been fully considered but they are not persuasive.

With regard to Haffner, Applicant's arguments regarding the structure of Haffner are moot in view of the new grounds of rejection.

With regard to Lee, Applicant argues that the inclusion of the ethylene propylene acts as a compatibilizer with regard to the LLDPE and the polypropylene. However, it is noted that claim 6 recites that propylene-ethylene copolymer is incompatible with the olefin polymer. Second, Applicant has not shown that the presence of any amount of ethylene propylene copolymer would act as a compatibilizer with the resins of Lee because the ethylene-propylene copolymer is present in an amount of 1-30 weight parts, while the LLDPE is present in an amount of 30-100 weight parts and the polypropylene is present in amounts of up to 100 weight parts. If only 1 weight part of the ethylene-propylene copolymer was present, would it still act to compatibilize the LLDPE and the polypropylene? Applicant has not shown how the 1 weight part of ethylene propylene would be sufficient to compatibilize the greater amounts of propylene and the LLDPE. Also, the claims recite particular polymers which are

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incompatible with the claimed polymer. It seems that compatibility and incompatibility would be inherent properties, in that a polyethylene polymer is by its nature incompatible with a polypropylene polymer and therefore if those two were admixed they would meet the claim limitations, regardless of whether another component is present which acts to compatibilize them. In other words, the claims do not require that no components which act to compatibilize the incompatible polymer are present, it simply requires the two incompatible polymers and it seems that compatibility and incompatibility are inherent properties of the polymers themselves.

With regard to the argument that Stopper does not disclose the claimed incompatibility between the matrix and the additional polymer, since Stopper teaches the same materials they would necessarily have to have the same properties. The instant specification discloses suitable polymers for the incompatible polymer and Stopper discloses the same materials. Therefore, this grounds of rejection is maintained.

With regard to the argument that Lee and Stopper do not teach the outer layers, this argument is moot in view of the new grounds of rejection.

With regard to Haffner, Applicant argues that the listed polymers in Haffner are amorphous or semi-crystalline and therefore would not be considered incompatible. However, there is nothing on the record to clearly distinguish between what polymers are and are not compatible. Haffner discloses the same materials as the instantly claimed polymers. Applicant argues that the Haffner blending polymers "include a significant ethylene component". However, there is nothing on the record currently

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which would show how much ethylene would be required in order to compatibilize the polymers of Haffner. With regard to the multi-layered structure, this argument is moot in view of the new grounds of rejection.

With regard to Burns, Burns discloses a list of materials which are suitable for use in forming breathable filled films. The materials disclosed by Burns include those disclosed in Stopper as well as including additional suitable materials such as u-LDPE. Applicant argues that Burns does not teach that they are equivalent but instead that they are known. However, since both the materials disclosed in Stopper and the materials disclosed in Burns are suitable for use in making breathable, filled films and that the two groups of materials were recognized in the art as equivalents which are suitable for the same purpose.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (703) 872-9306.


Elizabeth M. Cole
Primary Examiner
Art Unit 1771

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